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10/617,968	07/10/2003	Arvind Prabhakar	03226.441001;SUN030150	4049
32615	7590	10/22/2007		EXAMINER
OSHA LIANG L.L.P./SUN				SMARTH, GERALD A
1221 MCKINNEY, SUITE 2800				
HOUSTON, TX 77010			ART UNIT	PAPER NUMBER
			2146	
				NOTIFICATION DATE
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			10/22/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/617,968	PRABHAKAR ET AL.	
	Examiner	Art Unit	
	Gerald Smarth	2146	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on ____.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 30-58 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
 5) Claim(s) ____ is/are allowed.
 6) Claim(s) 30-58 is/are rejected.
 7) Claim(s) ____ is/are objected to.
 8) Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on ____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. ____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. ____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date ____	6) <input type="checkbox"/> Other: ____

DETAILED ACTION

1. It is hereby acknowledged that the following papers have been received and placed of record in the file: Remark date 7/30/07
2. Claims 30-58 are presented for examination. Claim 1-29 are currently being cancelled. Claims 30-58 are currently being added. Claims 30, 40, and 49 are independent claims. The remaining claims are dependent on claims 30, 40 and 49.
3. The Rejections are respectfully maintained and reproduced infra for application's convenience.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 30-58 rejected under 35 U.S.C. 103(a) as being unpatentable over Kirsh (6189030) as applied to claim above, and further in view of Kirsch (6269370) disclosed as Kirsch-New.

Regarding claim 30, Kirsch teaches a method for detecting a redirection loop, comprising:

Kirsch teaches Redirection loop but does not specifically teach tracking and a predefined maximum number of redirects. Kirsch-New teaches these limitation, initiating tracking when a first access to a first web destination causes a first redirection to a second web destination Determining, using the tracking logic, that the redirection loop exists when a predefined maximum number of redirections from the first web destination to the second web destination occurs within a predefined time limit; and determining the redirection loop.

Kirsch but doesn't specifically teach predetermined time limit for redirection loop nor predefined number of redirects.

Kirsch-New with Kirsch teaches these limitations of predefined time limit for redirection loops with a predefined and predefined maximum number of redirects.

Kirsch-New teaches these limitation, initiating tracking logic (***Kirsch-New discloses a URL trace must contend with problems of infinite depth due to URL mutual references and reference looping, made further complex by the existence of URL aliases page;***) when a first access to a first web destination causes a first redirection to a second web destination(***Kirsch discloses the final portion of the preferred structure of a redirection URL is a second URL Column 10 line 9-11;***

Determining, using the tracking logic, that the redirection loop exists when a predefined maximum number of redirections from the first web destination to the second web destination occurs within a predefined time limit; and terminating the redirection loop. (***Kirsch-New discloses if a reference is determined to be invalid for some number of consecutive attempts by the validation engine 40 to validate the reference over***

some time period, the information resource locator is marked as a "dead" URL and any contextual information stored by the database 42 in association with the URL is effectively purged from the database 42; Column 6 paragraph line 21-27)

Kirsch and Kirsch-New are analogous art because they are from the same field of endeavor computer networking monitoring.

It would be obvious to a person of ordinary skill in the art at the time of the invention to modify a method for redirection to include a loop which is tracked during a predefined time limit. One of ordinary skill in the art would have been motivated to make this modification in order to have a redirection loop tracked during a predefined time limit. This will allow for redirection loops to terminated and redirected. This method will help for Web crawlers to establish searchable web space maps. These maps, in turn, are made available on the Internet typically through an advertising supported or user-fee based search engine interface accessible via a defined web page. Completeness and timeliness of the listing of information resources available through the Internet is of paramount concern to such Internet business services. It also helps to a related problem is identifying for the subscriber the most active of current interest information sources.

Therefore it would be obvious to combine Kirsch and Kirsch-New for a method for redirection to detect loops with a predefined time limit.

Regarding claim 31, Kirsch taught the method of claim 30, as described above. Kirsch wherein the tracking logic identifies the first web destination and the second web destination. (***Kirsch discloses the final portion of the preferred structure of a redirection URL is a second URL Column 10 line 9-11)***

Regarding claim 32, Kirsch taught the method of claim 30, as described above. Kirsch further teaches wherein the predefined time limit is user configurable. (***Kirsch-New discloses preferably, the purge threshold is set at failure of five consecutive validation attempts made within a ten day period; Column 6 line 27-29)***

Regarding claim 33, Kirsch taught the method of claim 30, wherein determining, using the tracking logic, that the redirection loop exists further comprises: incrementing a counter when a second redirection from the first web destination to the second web destination occurs within the predefined time limit. (***Kirsch discloses simple web page access counters are relatively well known and used throughout the Web. These access counters are based on a common gateway interface (CGI) facility supported by modern HTTPd server systems; Column 2 line 54 –57***)

Regarding claim 34, Kirsch taught the method of claim 30, as described above. Kirsch further teaches wherein the predefined time limit specifies a maximum amount of time between two consecutive redirections from the first web destination to the second web destination. (***Kirsch discloses preferably, the purge threshold is set at failure of five consecutive validation attempts made within a ten day period; Column 6 line 27-29***)

Regarding claim 35, Kirsch taught the method of claim 33, as described above. Kirsch teaches further comprising: resetting the counter when the predefined time limit elapses after a subsequent redirection from the first web destination to the second web destination. (***Kirsch-New discloses if a reference is determined to be invalid for some number of consecutive attempts by the validation engine 40 to validate the reference over some time period, the information resource locator is marked as a "dead" URL and any contextual information stored by the database 42 in association with the URL is effectively purged from the database 42; Column 6 line 21-27***)

Regarding claim 36, Kirsch taught the method of claim 33, as described above. Kirsch further teaches wherein the counter is stored in a cookie. (***Kirsch discloses simple web page access counters are relatively well known and used throughout the***

Web. These access counters are based on a common gateway interface (CGI) facility supported by modern HTTPd server systems; Column 2 line 54 –57)

Regarding claim 37, Kirsch taught the method of claim 30, as described above. Kirsch further teaches wherein the tracking logic stores an identifier of the first web destination in a cookie. (**Kirsch discloses a further advantage of the present invention is that the reference identifier and a redirection directive can both be maintained wholly within the URL specification discretely provided by a client HTML request; Column 5 line 1-4.** It is known that that a cookie has an identifier for destinations in it's header.)

Regarding claim 38, Kirsch taught the method of claim 30, as described above. Kirsch further teaches wherein the first redirection is performed via at least one intermediate web destination. (**Kirsch discloses alternately, otherwise identical instantiations of an embedded redirection URL may reference any of a number of redirection servers; Column 10 line 25-7)**)

Regarding claim 39, Kirsch taught the method of claim 30, as described above. Kirsch further teaches wherein the tracking logic is connected to a web browser. (**Kirsch discloses thus, there is a need to be able to track information obtainable from a client browser when a hyper-linked advertiser's URL is selected; Column 2 line 38-41)**)

Regarding claim 40, Kirsch teaches a system for detecting a redirection loop, comprising:

a web browser for accessing a first web destination and a second web destination; and an application redirect control system that initiates tracking logic when a first access to the first web destination causes a first redirection to the second web

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destination; determines, using the tracking logic, that the redirection loop exists when a predefined maximum number of redirections from the first web destination to the second web destination occurs within a predefined time limit; and terminates the redirection loop.

Kirsch but doesn't specifically teach predetermined time limit for redirection loop nor predefined number of redirects.

Kirsch-New with Kirsch teaches these limitations of predefined time limit for redirection loops with a predefined and predefined maximum number of redirects.

Kirsch teaches a system for detecting a redirection loop, comprising:
a web browser (***Kirsch discloses thus, there is a need to be able to track information obtainable from a client browser when a hyper-linked advertiser's URL is selected; Column 2 line 37-39***) for accessing a first web destination and a second web destination; (***Kirsch discloses the final portion of the preferred structure of a redirection URL is a second URL Column 10 line 9-11***);
and an application redirect control system that initiates tracking logic when a first access to the first web destination causes a first redirection to the second web destination; (***Kirsch discloses a message is provided to a tracking server system in response to a client system referencing a predetermined resource locator that corresponds to a resource external to the tracking server system; Abstract. and Kirsch discloses the final portion of the preferred structure of a redirection URL is a second URL Column 10 line 9-11***)
determines, using the tracking logic, that the redirection loop exists when a predefined maximum number of redirections from the first web destination to the second web destination occurs within a predefined time limit; and terminates the redirection loop. (***Kirsch-New discloses if a reference is determined to be invalid for some number of consecutive attempts by the validation engine 40 to validate the reference over some time period, the information resource locator is marked as a "dead" URL and any contextual information stored by the database 42 in association with the URL is effectively purged from the database 42; Column 6 paragraph line 21-27***)

It would be obvious to a person of ordinary skill in the art at the time of the invention to modify a method for redirection to include a loop which is tracked during a predefined time limit. One of ordinary skill in the art would have been motivated to make this modification in order to have a redirection loop tracked during a predefined time limit and a predefined maximum number of redirects. This will allow for redirection loops to terminate and redirected. This method will help for Web crawlers to establish searchable web space maps. These maps, in turn, are made available on the Internet typically through an advertising supported or user-fee based search engine interface accessible via a defined web page. Completeness and timeliness of the listing of information resources available through the Internet is of paramount concern to such Internet business services. It also helps to a related problem is identifying for the subscriber the most active of current interest information sources.

Therefore it would be obvious to combine Kirsch and Kirsch-New for a method for redirection to detect loops with a predefined time limit.

Regarding claim 41, Kirsch teaches the system of claim 40, as described above. Kirsch further discloses wherein the tracking logic identifies a redirection in the first web destination. (*Kirsch discloses the system the information stored in the embedded URL first served with the web page to client system 12 is thus provided back to the server system 16 upon selection of the URL even though the apparent target of the URL is the external server system. A redirection response is then provided by the server system 16 to the client system 12 providing the corresponding redirection URL; Column 7 21-27*)

Regarding claim 42, Kirsch taught the system of claim 40, as described above. Kirsch further teaches comprising:
a configuration unit for configuring the predefined time limit. (*Kirsch-New discloses if a reference is determined to be invalid for some number of consecutive attempts by the validation engine 40 to validate the reference over some time period, the information resource locator is marked as a "dead" URL and any contextual*

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information stored by the database 42 in association with the URL is effectively purged from the database 42; Column 6 line 21-27)

Regarding claim 43 Kirsch taught the system of claim 40, as described above. Kirsch further taught wherein a number of redirections to the second web destination from the first web destination is stored as a counter. (***Kirsch teaches the "data" term of the redirection URL provides reference identifier data to the HTTPd server 30 that can be used to further identify and potentially validate a redirection URL to the HTTPd server 30. The data thus permits an accounting of the redirection URL to be made by the HTTPd server 30; Column 8 line 24-28)***

Regarding claim 44, Kirsch taught the system of claim 40, as described above. Kirsch further teaches wherein the predefined time limit specifies a maximum amount of time between two consecutive redirections from the first web destination to the second web destination. (***Kirsch-New discloses if a reference is determined to be invalid for some number of consecutive attempts by the validation engine 40 to validate the reference over some time period, the information resource locator is marked as a "dead" URL and any contextual information stored by the database 42 in association with the URL is effectively purged from the database 42; Column 6 line 21-27)***

Regarding claim 45, Kirsch taught the system of claim 43, as described above. Kirsch teaches wherein the application redirect control system further resets the counter when the predefined time limit elapses after a subsequent redirection from the first web destination to the second web destination. (***Kirsch-New discloses if a reference is determined to be invalid for some number of consecutive attempts by the validation engine 40 to validate the reference over some time period, the information resource locator is marked as a "dead" URL and any contextual information stored by the database 42 in association with the URL is effectively purged from the database 42; Column 6 line 21-27)***

Regarding claim 46, Kirsch taught the system of claim 42, as described above. Kirsch further teaches wherein the counter is stored in a cookie. (**Kirsch discloses simple web page access counters are relatively well known and used throughout the Web. These access counters are based on a common gateway interface (CGI) facility supported by modern HTTPd server systems; Column 2 line 54 –57**)

Regarding claim 47, Kirsch taught the the system of claim 39, as described above. Kirsch further teaches wherein the tracking logic stores an identifier of the first web destination in a cookie. (**Kirsch discloses a further advantage of the present invention is that the reference identifier and a redirection directive can both be maintained wholly within the URL specification discretely provided by a client HTML request; Column 5 line 1-4. It is known that that a cookie has an identifier for destination in it's header.**)

Regarding claim 48, Kirsch taught the system of claim 39, as described above. Kirsch further teaches wherein the first redirection is performed via at least one intermediate web destination. (**Kirsch discloses alternately, otherwise identical instantiations of an embedded redirection URL may reference any of a number of redirection servers; Column 10 line 25-7**)

Regarding claim 49, Kirsch teaches a method for detecting a redirection loop, comprising: receiving a first request to process a first web destination; identifying a first redirection from the first web destination to a second web destination when processing the first request; (**Kirsch discloses the final portion of the preferred structure of a redirection URL is a second URL Column 10 line 9-11**); initiating tracking logic based on the first redirection; (**Kirsch discloses thus, there is a need to be able to track information obtainable from a client browser when a hyper-linked advertiser's URL is selected; Column 2 line 37-39**). receiving a

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subsequent request to process the first web destination; (**Kirsch discloses the difficulty in obtaining direct reference information arises from the fact that a web page with an embedded advertisement and corresponding remote URL is served in its entirety to the client browser upon first reference to the web page identifying;**) using the tracking logic, a subsequent redirection from the first web destination to the second web destination when processing the subsequent request; (**Kirsch discloses this second URL preferably identifies directly the target server system for the redirection.**) and incrementing a counter when the subsequent redirection from the first web destination to the second web destination occurs within a predefined time limit. (**Kirsch discloses simple web page access counters are relatively well known and used throughout the Web. These access counters are based on a common gateway interface (CGI) facility supported by modern HTTPd server systems; Column 2 line 54 –57)**

Regarding claim 50, Kirsch and Kirsch-New taught the method of claim 49, as described above. Kirsch further wherein the tracking logic identifies the first web destination and the second web destination. (**Kirsch discloses the final portion of the preferred structure of a redirection URL is a second URL Column 10 line 9-11**)

Regarding claim 51, Kirsch and Kirsch-New taught the method of claim 49, as described above. Kirsch further teaches wherein the predefined time limit is user configurable. (**Kirsch-New discloses preferably, the purge threshold is set at failure of five consecutive validation attempts made within a ten day period; Column 6 line 27-29**)

Regarding claim 52, Kirsch along with Kirsch-New taught the method of claim 49, as described above. Kirsch further teaches comprising: detecting the redirection loop when the counter exceeds a predefined maximum number of redirections. (**Kirsch-New discloses preferably, the purge threshold is set at**

***failure of five consecutive validation attempts made within a ten day period;
Column 6 line 27-29)***

Regarding claim 53, Kirsch along with Kirsch-New taught the method of claim 52, as described above. Kirsch further teaches comprising: terminating processing to the second web destination. (***Kirsch-New discloses if a reference is determined to be invalid for some number of consecutive attempts by the validation engine 40 to validate the reference over some time period, the information resource locator is marked as a "dead" URL and any contextual information stored by the database 42 in association with the URL is effectively purged from the database 42; Column 6 paragraph line 21-27)***)

Regarding claim 54, Kirsch and Kirsch-New taught the method of claim 49, as described above. Kirsch further comprising: resetting the counter when the predefined time limit elapses after any redirection from the first web destination to the second web destination. (***Kirsch discloses the HTTPd server 30 records the values of MIME information (such as cookies) and the form variables (in this case ak and rd). An HTTP redirect message is then created by the HTTPd server 30 and returned to the client computer system. Column 12 line 49-)***)

Regarding claim 55, Kirsch and Kirsch-New taught the method of claim 49, as described above. Kirsch further teaches wherein the counter is stored in a cookie. (***Kirsch discloses simple web page access counters are relatively well known and used throughout the Web. These access counters are based on a common gateway interface (CGI) facility supported by modern HTTPd server systems; Column 2 line 54 –57)***)

Regarding claim 56, Kirsch and Kirsch-New taught the method of the method of claim 49, wherein the tracking logic stores an identifier of the first web destination in a cookie. (***Kirsch discloses a further advantage of the present invention is that the***

reference identifier and a redirection directive can both be maintained wholly within the URL specification discretely provided by a client HTML request; Column 5 line 1-4. It is known that that a cookie has an identifier for destination in it's header.)

Regarding claim 57, Kirsch and Kirsch-New taught the method of claim 49, as described above. Kirsch further teaches wherein the first redirection is performed via at least one intermediate web destination. (**Kirsch discloses alternately, otherwise identical instantiations of an embedded redirection URL may reference any of a number of redirection servers; Column 10 line 25-7**)

Regarding claim 58, Kirsch and Kirsch-New taught the method of claim 49, as described above. Kirsch-New further teaches wherein the tracking logic is connected to a web browser. (**Kirsch discloses thus, there is a need to be able to track information obtainable from a client browser when a hyper-linked advertiser's URL is selected; Column 2 line 38-41**)

Response to Argument

Applicant's arguments with respect to claim 30-48, & 49-58 have been considered but are moot in view of new ground(s) or rejection.

Applicant added limitation for claims 30-48 are being anticipated by Kirsch in view of Kirsch-New which shows the feature wherein tracking logic is being used for determining a set number of redirections which can cause loops. Besides a number

count mechanism it also has a time frame which is utilized in order to end the redirection loops.

Claims 49-58 are also being anticipated by Kirsch in view of Kirsch-New. Both Kirsch and Kirsch-New are using a counter in-order to tell how many times a redirection has hit a web destination. Kirsch also discloses specifying a predetermined time period for these redirections to occur among multiple web destinations.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gerald Smarth whose telephone number is (571)270-1923. The examiner can normally be reached on Monday-Friday(7:30am-5:00pm)est.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeff Pwu can be reached on (571)272-6798. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

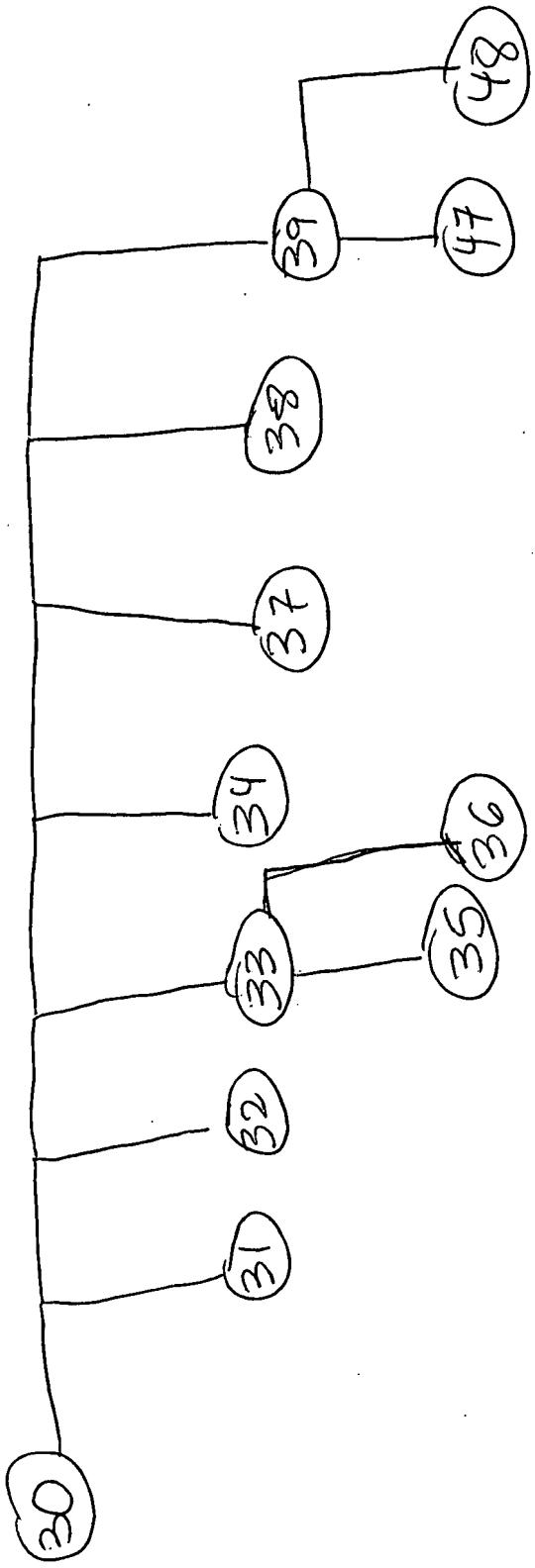
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Gerald Smarth

JEFFREY PWU
SUPERVISORY PATENT EXAMINER

10/14/07



Amendment
System Method for guarding against
infinite loops for multi point
redundant

